IN THE SPECIFICATION

Please amend the paragraph at p. 2, ll. 7-28, as follows:

~~As described in „Ember Networks“ (http://www.ember.com/) and „Millennial Networks“ (http://www.millennial.net/), current~~ Current systems typically employ conventional low-power radio technology or Bluetooth radio systems, which require a substantial amount of energy for transmission and reception. Therefore, even if the traffic pattern is very sporadic, both units (receiver and transmitter) are turned on from time to time, need to be synchronized and finally exchange information (if there is any information to be exchanged). Typically for short-range wireless devices, the reception unit takes the same power (or even higher power) as the transmission unit. Even if no information needs to be received, substantial power is wasted just to be able to receive data. In order to save as much power as possible, complex duty-cycle radio protocols are employed. Duty cycling raises another problem: Information can only be exchanged during 'on' time, where both the transmitter and the corresponding receiver are activated at the same instance of time. Therefore, in a typical duty-cycle protocol – e.g. with a 1 % duty cycle, which means that e.g. a transceiver is switched on for 0.1 seconds and turned off for 9.9 seconds – messages may need to be delayed substantially.

Please amend the paragraph at p. 2, l. 30 – p. 3, l. 6, as follows:

Said low-power radio technology and said Bluetooth radio systems are typically employed for each type of node within a wireless sensor network. Therefore, even the simplest nodes (and those maybe deployed massively) use the same kind of radio technology (which consumes substantial power and imposes a certain system cost). A more suitable wireless network system would allow scaling of the radio subsystem and the radio protocol according to the respective node's task. At least the scaling of the radio protocol and routing

protocol is partially used in current systems (e.g. by defining end points, routers and gateways~~, cf. „Millennial Networks", http://www.millennial.net/~~).

Please amend the paragraph at p. 4, ll. 10-27, as follows:

Conventional wireless sensor networks utilize proprietary radio access technologies (or a modification of standard radio devices such as Bluetooth) and proprietary radio access protocols. As their network topology is typically meshed, they are able to support ad-hoc features (e.g. node detection, node identification and routing) without a central controlling device and can be tailored for a specific application (e.g. military surveillance, production or process surveillance). For further background information on sensor networks and specifically wireless sensor networks the interested reader is referred to the following articles: „Wireless Sensor Networks: A Survey" (Computer Networks 38 (2002), pp. 393-422, 2002, published by Elsevier Science B.V.) by I.F. Akyildiz, W. Su, Y. Sankarasubramaniam, and E. Cayirci, „A Survey on Sensor Networks" (IEEE Communication Magazine, August 2002) by the same authors, and „Wireless Sensors. Streamline Data Distribution" (Communication System Design, July/August 2003~~, http://www.CommsDesign.com~~) by T. Riedel.

Please amend the paragraph at p. 5, ll. 22-32, as follows:

A typical example are the Bluetooth radio interface or other technologies fulfilling the regulatory conditions described in „FCC 15.247 Operation within the Bands 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz" ~~(http://www.access.gpo.gov/nara/cfr/waisidx_01/47cfr15_01.html)~~ and „Electromagnetic Compatibility and Radio Spectrum matters (ERM); Wideband Transmission Systems, Data Transmission Equipment Operating in the 2.4-GHz ISM Band and Using Spread-Spectrum Modulation Techniques;

Harmonized EN Covering Essential Requirements under Article 3.2 of the R&TTE Directive" (ETS 300 328, November 2002~~, http://www.etsi.org/~~).